Notebook, N-05-04-22

This notebook contains dated entries from April 1905 and November 1906. All entries are by Edison. Among the entries are notes and drawings regarding storage battery experiments. There are also drawings of phonographs, including several with a "double diamond" reproducer. The pages are unnumbered, and several pages have been removed from the book. Approximately 90 pages have been used.

156
×5
780

112
3)1150
383
1533

1533

3)800
266

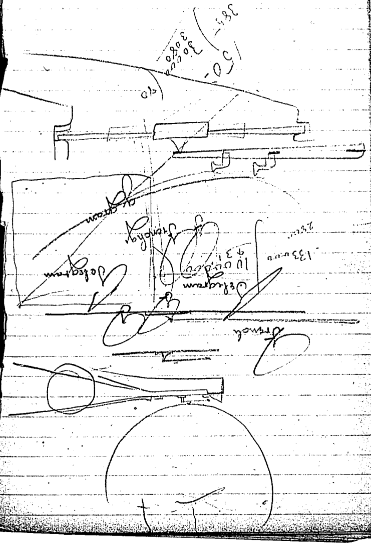
183

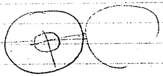
137

183

37

1906

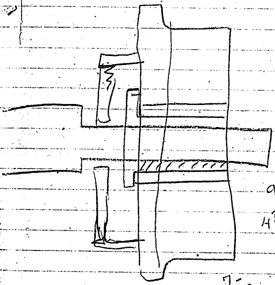




24-
14
96
24
336
2
672

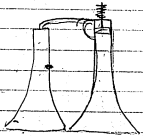
1500000
6720
3288
2680
592

(149



91
5
455
900 ft

7- 13
7
91- 19 od

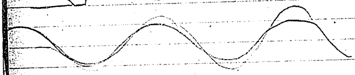


6 36
5
180

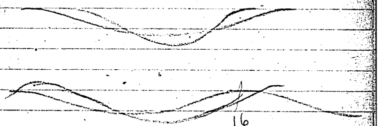
29"
12
58
29
348

350 ft

350)1728(5
1750



40 | 235 | 6 48 miles
240



16
120
2
3
16.7. 192
80

3 | 1150
383
3
153.20
1
3.066
3.33
1.530
1.6330
147 147

3 | 1000
333

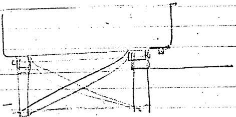
1333
120
26660
1333
1597

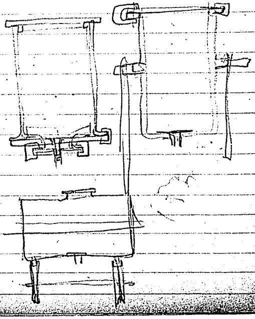
192
82
384
160 536
80
1280 1574

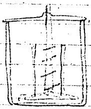
235

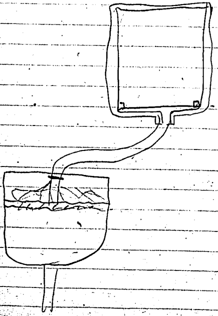
2 | 157
78
235

24
24
76
57
460
4) 460 –
115 –
345 | 3.430 (100 –



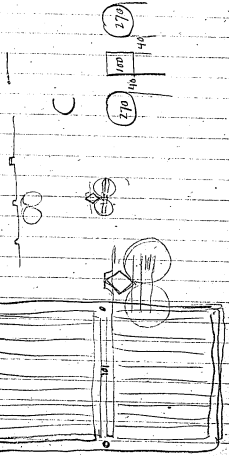


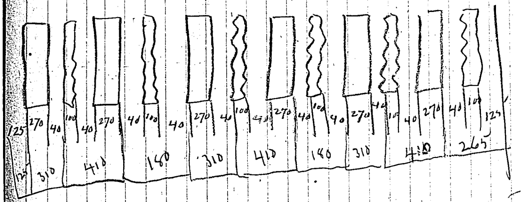




Iron- Nickel-Cobalt, Potassium -
Hydrogen Oxygen Sulphur -
Manganese Mercury
Carbon Oxalic acid, | Nitric acid
Sulphuric acid, Hypochlorous
acid - Sugar Rubber, Water
Cadmium, Copper Vaseline,
glass,

apl 22 1905 SB




125
270
40
100
40
270
40
100
40
270
40
100
270
270
40
100
40
270
40
100
40
270
40
100
125
125
310
410
180
310
410
180
310
410
265

125
310
410
180
310
410
180
310
410
265
2910

140
12

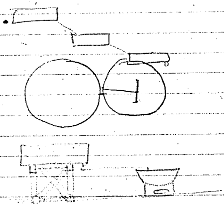
140
16
10
120
10
140
20
250
250
2.77

88
50
134

2910
2770
14

11

32



4500 4000

2000) 18000

450

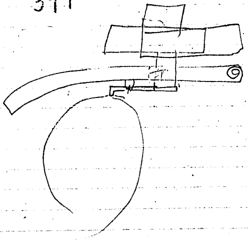
(9

Cement.

1 Recd ny Pat x	act Logue with	Gil	E&B
40 000 Nov	5000 to Miller 664 Logue	15 540 -	16 875 2500 2700
Oct 25 000 EngCo 25298 EMfgCo 2022 Natl Surg 1615			10 200
May EMfg 1400 69500		16353	~~Recd 9500~~
Sept - 22800 EMfg 80022	Paid Gladstone 78007		
Aug 30000	726 Logue Gilmore 4848		8371

April	[illegible]	[illegible]	SB
58000		10190	
June			
76000			
July			
31500		10983	

	Recd	Gil —
May	69500	16353
June	76000	
July	31500	10983
Aug	30000	4848
Sept	102800 —	15540
Oct	50000	47724
Nov —	40000	
	399800	



1 000 000 - 1" H_2O 16 gram. 62500 cm to milligram

62) 1778 (2.78

124

.538

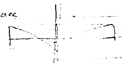
.496

.434

62500) 540000 (8

500000

Brace



28) 446 (16.

28

166

168

Rod 1/16 inch - 18

1600) 1 000 000 000 (62500

960000

400000

320000

80000

80000

1750

1.750

175

875

1225

175

306250

62500) 8078000 (129

625

1828

1250

5780

5625

6.125 000

1.953 000

8.078 000

62500) 2625000 (42

2500000

125

62500 cm To milgm -

water weight -

Dia 1.75 dia 002 thick 3/16 flange - 1.

Top 3.062.500 cm 1/1000 deep 002 6.125 000 cm

flange 1.953.000 - Total 8.078.000 -

Total wt 129 Milgrms

B braces 2.625.000 cm 42 milg

Tube 540000 cm 1" long/16 dia 003 thick -

8. milgms

Al Spec g 2.5

	129
	42
	8
Total wt alumin	179
	2.5
447 Milgrms -	895
	358
	447

447

135

582 Total -

Lever, Rubber, Connector

Tips etc 135 milg -

3) 582

194

388 -

25) 62500 (2500

50

125

125

25000) 7812500 (312 milg

75000

31250

25000

62500

62500

25000 302

75000

1/4 x 1/4

Lever 1/2 [illegible] long 50 — 200/1000 high 15/1000 thick

6 1250
125.0
625.0
250
125
1.5625

500
200
1000
15
2.4
62500

2 to 1

3 to 1

1750
175.0
8750
12250
1750
306250
1750
1.5600

175
175

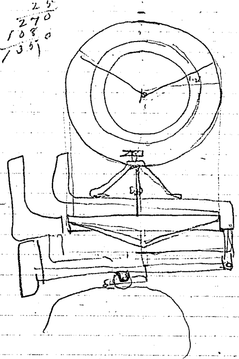
2 to 1

4 to 1

Lever 1/2 × $\frac{200}{1000}$ high 15/1000 thick
1.500 000 cm — 24 milgrm —
Ends 15 milg Connector 15 milg Rubber 10 milg

24
15
15
54
25
270
1080
1350

10



4ft — 3ft

11.5
40
7.5
1.2
.15
75.0
90

6" dia

18/90 (5

60_

60) 1400 (23
120
200
180

23 —

300) 1400 (4.6
1200
2000

60 —	23 —	11.5
100 —	14	7
150	9.3	4.65
200 —	7.0	3.5
300	4.6	2.3
350	4.0	2.0
400 —	3.5	1.75
500	2.8	1.4
600	2.33	1.16
700 —	2.00	1.00 —

600) 400 (

400) 1400 (3.5
1200
2000

600) 1400 (2.33
1200
2000
1800
200

4000	1.5"	
2000	3"	
1	6"	
500	12	1 ft
250	24	2 ft
125	48	4 ft
62	96 —	8 ft

192

16 sec	31.25	.375
32 se	15.62	187.5
64	7.81	93.75
128	3.90	46.87
256 —	1.95	23.43
512	0.975	11.71
1024	.487	5.85
2048	.243	2.92
4096 —	.121	1.46

2) 781
2) 390
2) 195
2) 97.5
2) 487
243

2) 375
2) 187.5
2) 93.75
2) 46.87
2) 23.43
2) 11.71
2) 5.85
2) 2.92
1.46

12) 3125 (26
24
72

16) 1000 (62.5
96
40
32
80

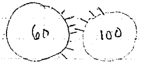
3125
12
6250
3125
375.0

128 — 47"

3 4 — 1
20

16
12
32
192

18) 192 (10
18
12



2000
93
2000
186000

$98 ton

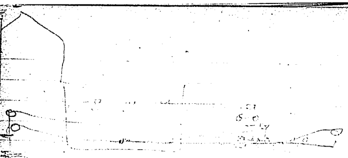
2000
1860
140

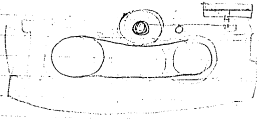
140
70
980

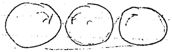
$.25

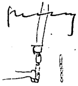
93 | 4000
372

400
372
270
960
1656
23



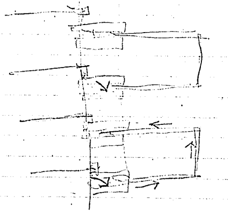


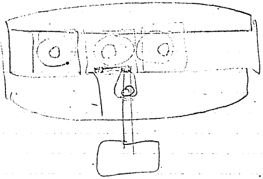




240 200
218

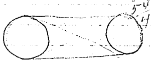
160
360

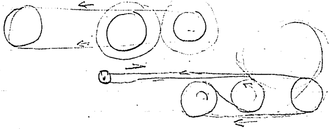




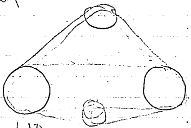
91000 | 150000 1,65
91000
4
56+ 59000
546
544000

35 | 1500 (42
140
100
1





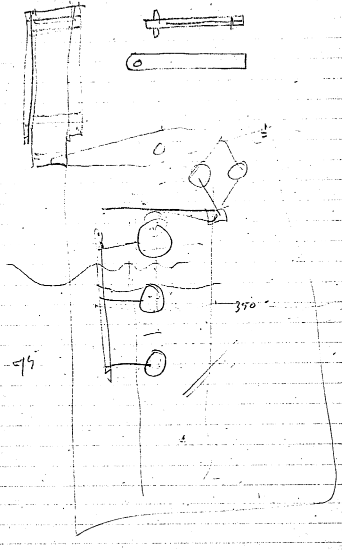
42 Ropes



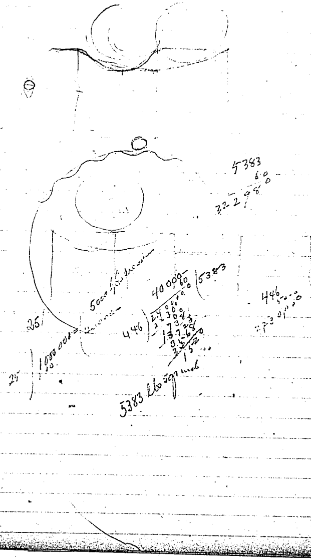
60

80
30
60 | 2400 (40
240

1.6



350
75



5383
60
322980
5000 lbs pressure
40000
5383
446
25
1000000
25
5383 lbs sq inch
446

58000 | 900.000 (15
580000
3200000
2900000

1000 | 58.000.000 (58 600 mily
50000
8000
8000

58000 to mily

3

125
3
375

60
40
240

6

0

446 | 3.568.000.000 (8.000.000
3568

15 mily

1350 | 8.100.000 (1 gram
8100
600

15
15
75
15
225
6000
1350

7 9/16

16 | 63 (4

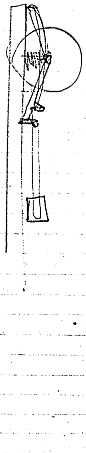
62 | 1728 (26 miles
124
488

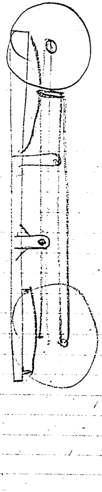
26 | 446 (17
26
182

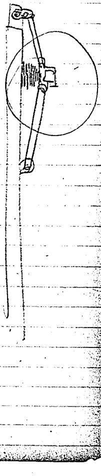
17 grams to inch

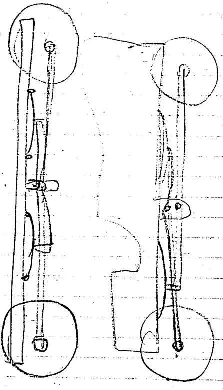
2400
375
12000
16800
16800
7200
9000

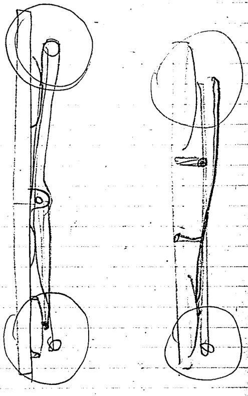
17 | 1.000 000 (58.800.000
65
136
136
40
63

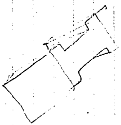


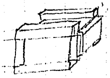


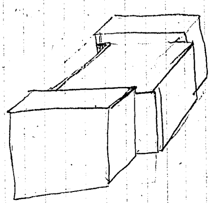








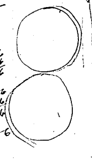




16
9
144
180
11520
144
2592 $\frac{1}{8}$

64
8
512

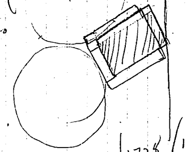
16
16
96
16
256
1536
256
4096



180
4000) 25920 (6.48
2400
1920
1600
3200

1.5
6
30
90
9.30

$6\frac{1}{2}$ inch



90) 1728 (19.2
90
828
810
180

$\frac{1}{3}$

100
33

6.5) 19.2 (3
19.5

192) 630 (.33
576
746
570
164

850-

784

12

5 2

172) 7500 (43.5
688
620
516
104

22750 cm 1 mlg al —
" Mg

397235
23541
31388
3413445

22750
341345

7847
29

29 | 1000

238
15
253

230) 350000 (15

Mg 153 mulg
Al + 238

Mg Monomh 23400
Al — 56640
Larger 60 ...
Al 2.33 times than Mg

341345) 5250000 (15.3
341345
1836550
1706725
129825

238
238
1904
714
476
56644

22750) 5250000 (238
45500
70000
68250
1750

23400) 56640 (2.33
46800
78400
70200

238
5
1190

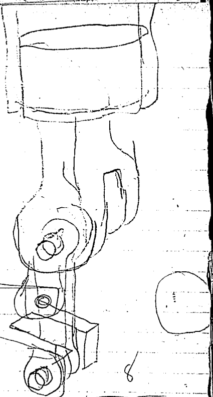
2)1190
595

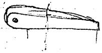
1250
350
62500
3750
437500
60
26250000

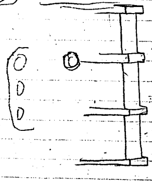
595

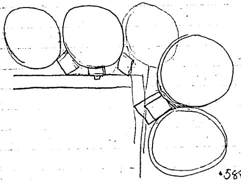
400
400
1600

1250



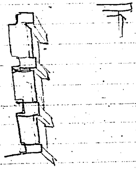


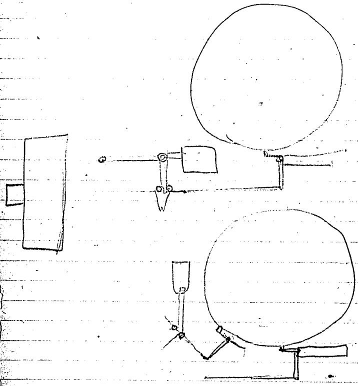


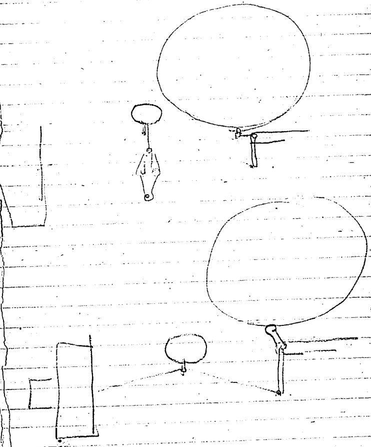


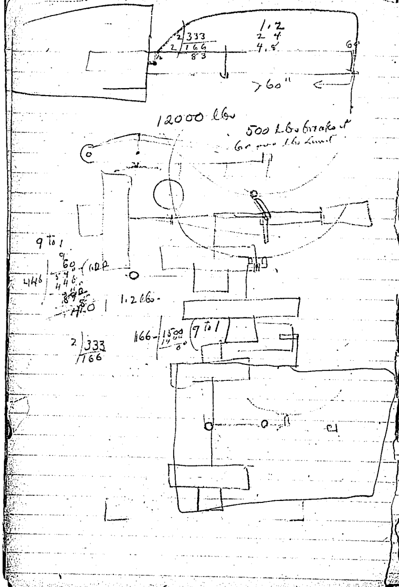
.588 grm

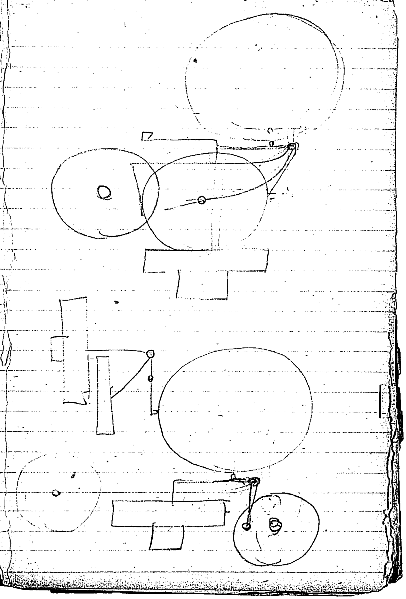
1190
40
238
25) 1.468 = .588
125
218
200
180

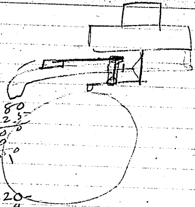







2/333
2/166
83
1/2
1.2
2.4
4.8
60
>60"
12000 lbs
500 lbs brake at
60 ... lbs limit
9 to 1
9
60
446
546
446
1.2166
2/333
166
166
1500
1400
9 to 1



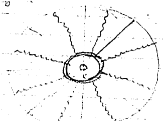


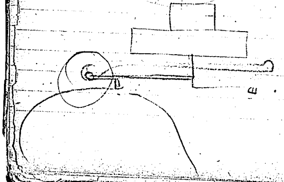
.180
25
900
360
4500

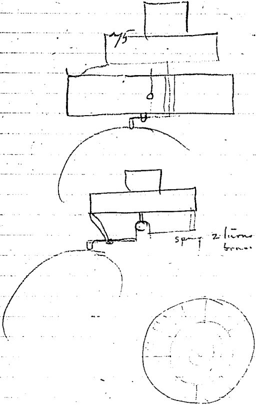
220
4
880 5 tons

1 Car load

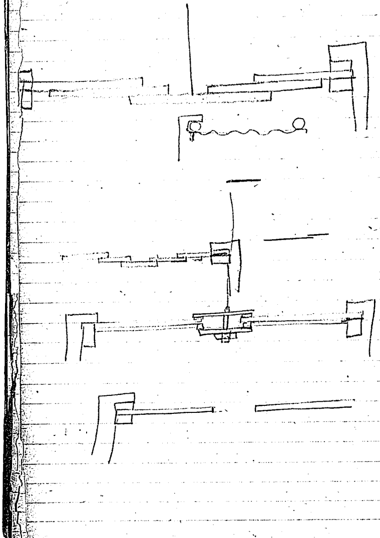
370
70
25900

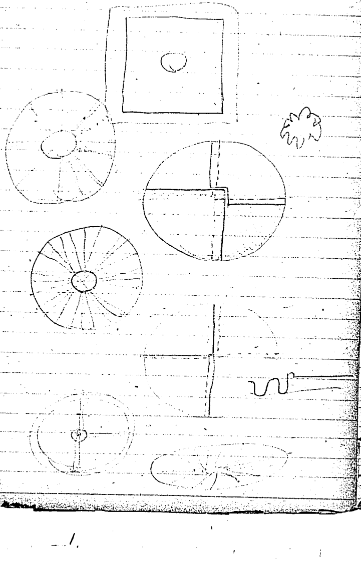


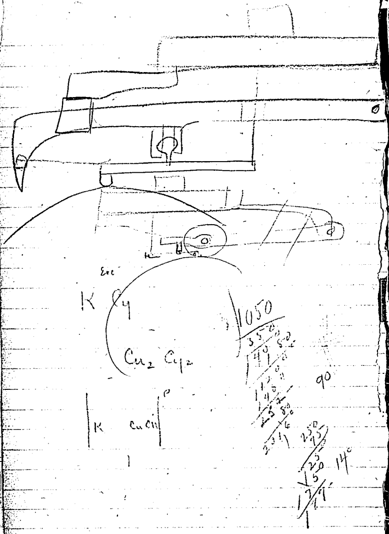


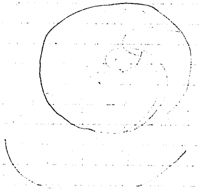


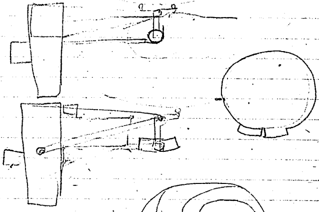
spring 2 turns silk, ~~polished~~
brass

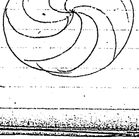


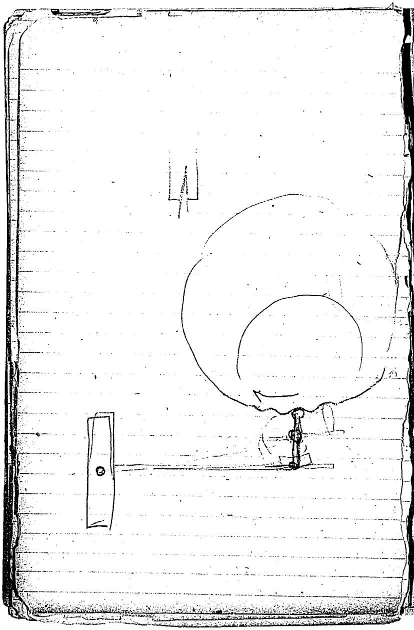


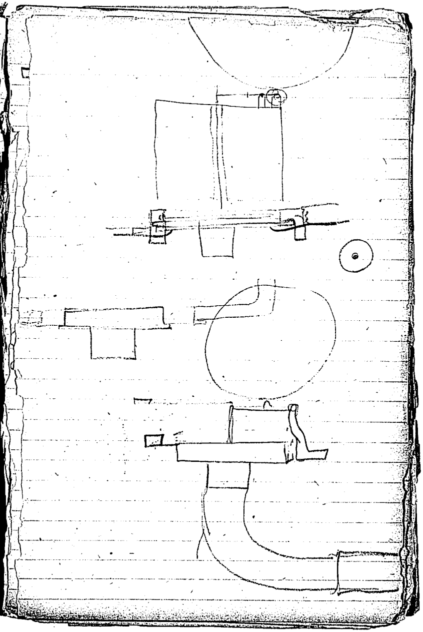

Exc
K Cy
Cu2 Cy2
K Cu Cn
1050
90
14°

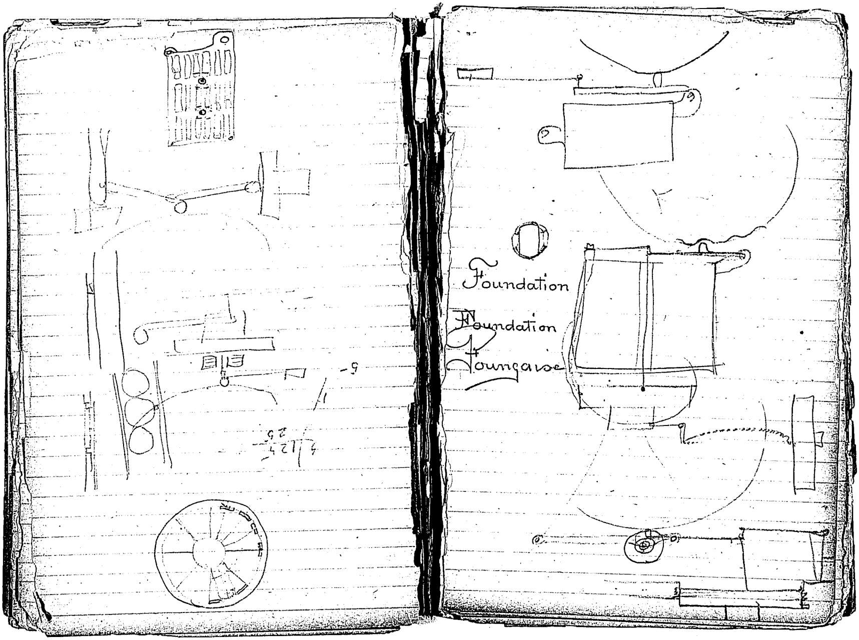








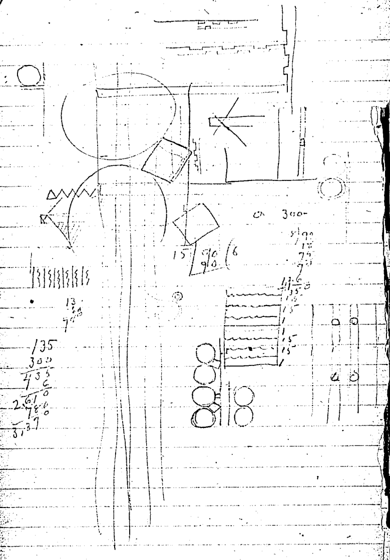


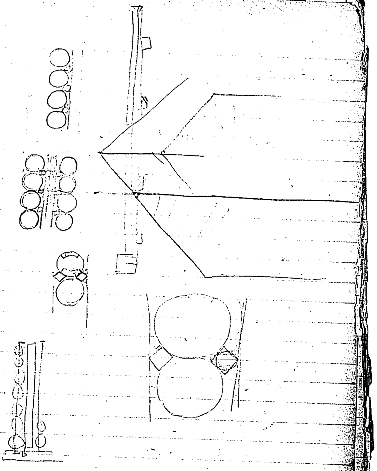


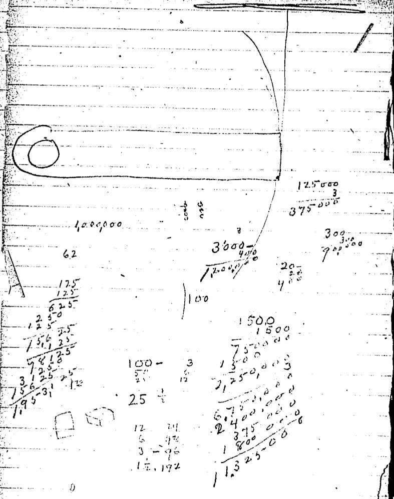
Foundation

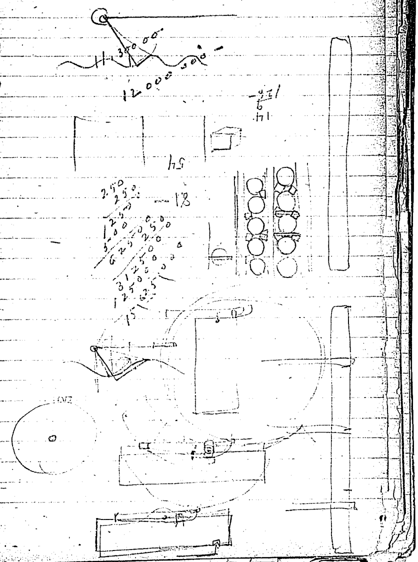
Foundation

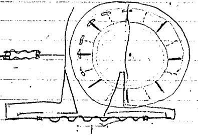
Fouragaise


ca 300-

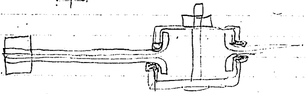


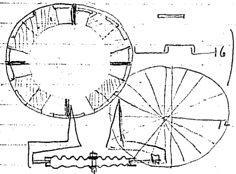

125000
375000
4,000,000
1,200,000
1500
1500
100 -
1,325,000


12000



125
125
625
250
125
156,250



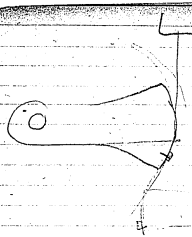


125
3
3750 (234
32
55
48
40
7

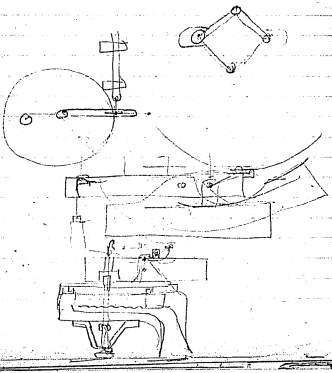
156000 2
3,120,000

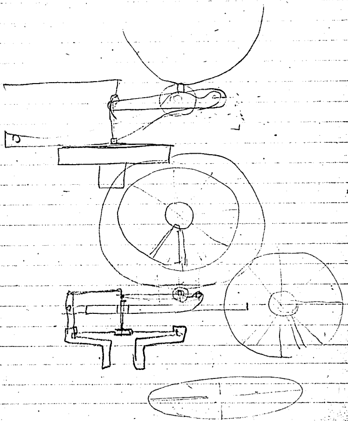
375
375
1875
2625
1125
140625

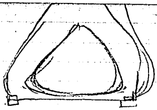
14000) 3120,000 (22
28000
32000
28000
4000



-09







5 to 1 6

446 | 40000 (90
4014

400.
25

2

5 | 1350
270

150
150
1
0 6
3 5 6
0 5
0
1

300 KoH
60
446 | 1800
1784
16 (403

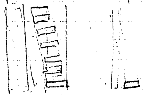
630
126
75

446 | 1350
1338 (3

180
450
630
1260
1450
1800

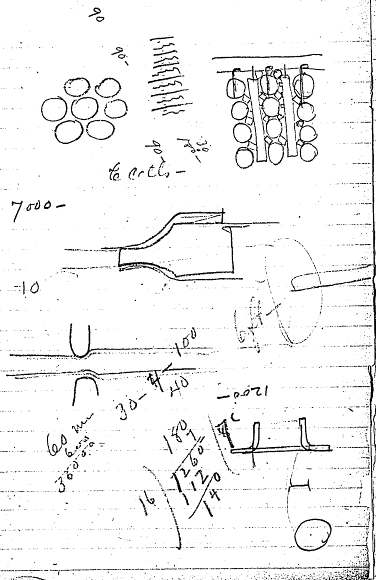
180
25
900
360
45

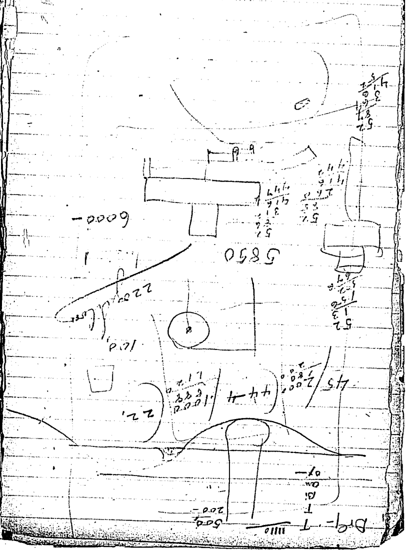
M

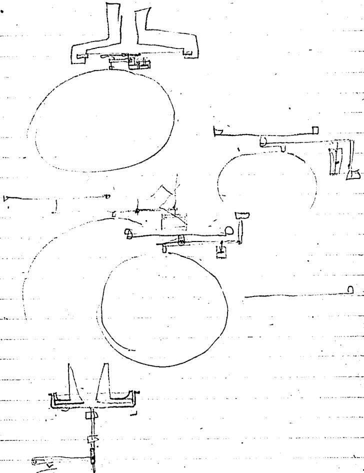


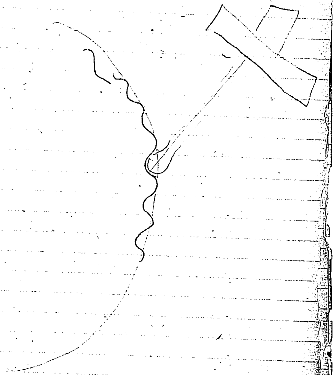
3 | 150
50

3 | 4000
1333
1"500


6 cells
30-4
60 mu

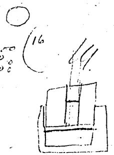






250
250
12500
500
625

1000000 (16
62500
375000



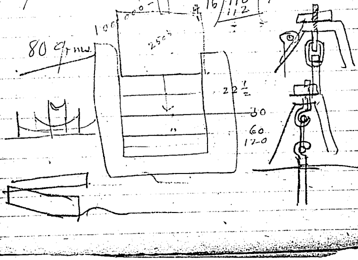
1,560,000
3
4,680000

6670 grm
60) 6690 (111
60
69
60

1200
400
480000
4
1920000

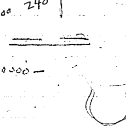
60/1000

16) 110 (7
112



1000000
80 grms
2500
22½
30
60
120

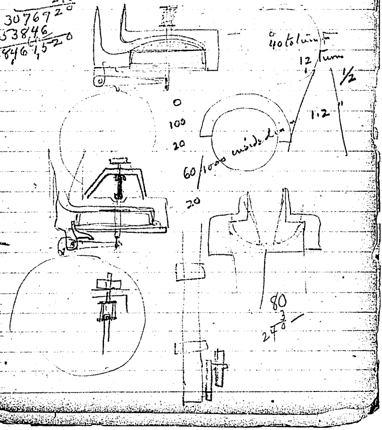
13/1000 240 grms



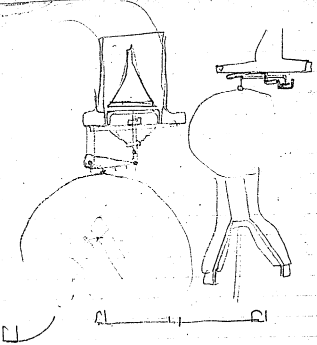
mch 1000000

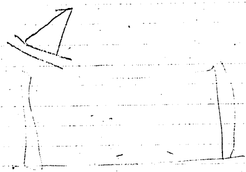
13) 1000000 (76923
91
90
78
120
117
30
40

76923
240
3076920
153846
18461520



40 to lum F
12 Turn
½
1.2"
0
100
20
60/1000 inside dia
20
80
3
240





446) 18 461 000 (41392 grn

17 84

621

446

1750

1338

4120

4014

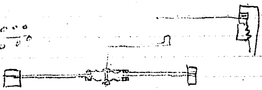
1060

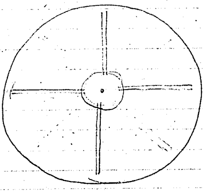
41392 lbs per sq inch on ball

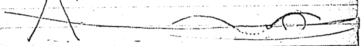
446

40000

17840000







200 1666

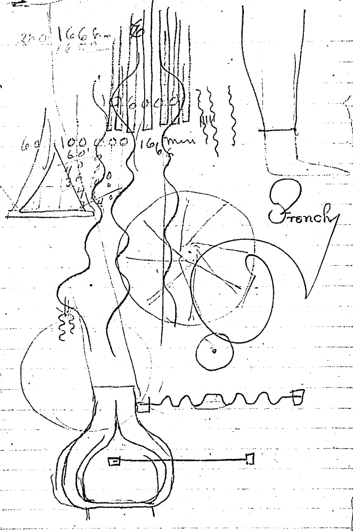
100000

60 100000

600

166 min

1666



11

1300
120
2600
3000
156
500
6
1
500
56

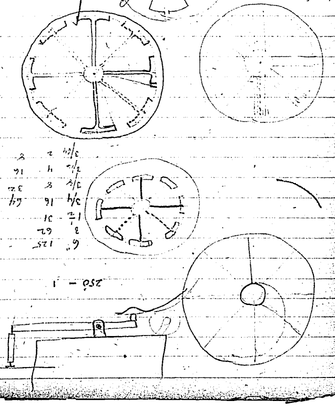
155

12) 155
12
35

13

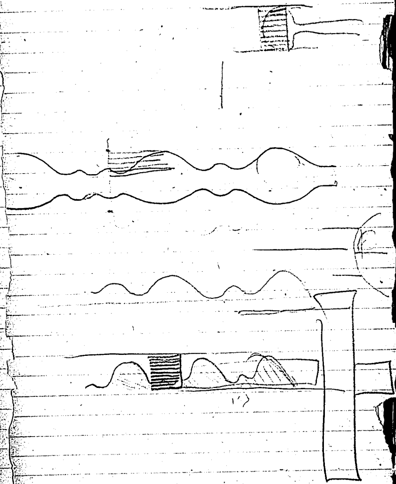
13 ft.

100



6"	125	
3	62	
1½	31	
3/4	16	64
3/8	8	32
3/16	4	16
3/64	2	8

250 – 1

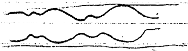


1st 2nd 3d
940 933 961

9)8402
930

9)8464
940

.76



9)8646
961

1st 2
939 906 915

9)8450
939

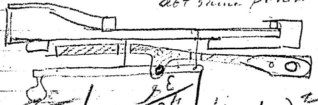
9)8232
915

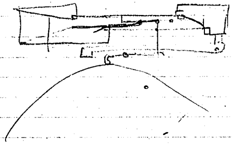
9)8153
906

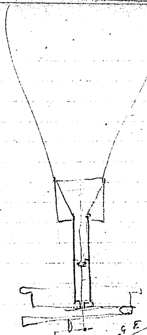
New - Nov 18 1906

No 1 Double Dia

twice amplitude - at same power







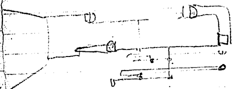
K 33 — No. 429

33 1763

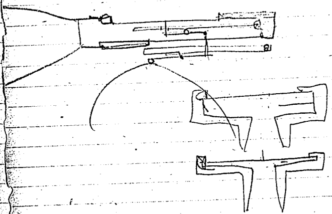
33

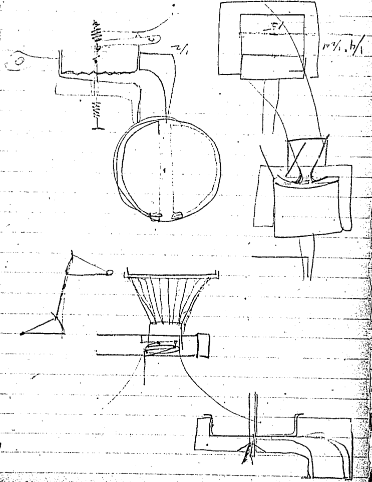
Nov 18 1906

Drill Dia



Deposited COTs





52 ft — 6 ft 28

3)100000
33000

165
161
17
66

Sb —
Wo —
Sn —
Bi —

115)2240(19.5

2240)45000(20
9000

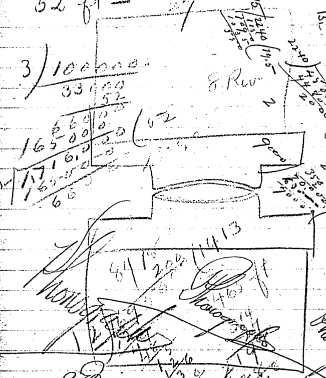
8 Rev

9000

200

358
70
1400

7.7



11 13

61

200

Phonograph

Photograph

Phonograph

Photograph

Phonograph

Photograph

Photograph

Phonograph

1465

5

175

12

1/2

7 7/64

19.5)3500(17.9

8)18
2.2

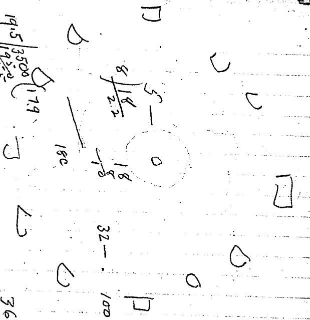
18C

18
18

1/20,000
600
200

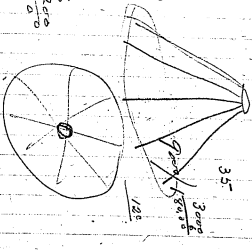
32 —
100

7/20
36
200



21 — 2
63

C — 63
100
4)763
41



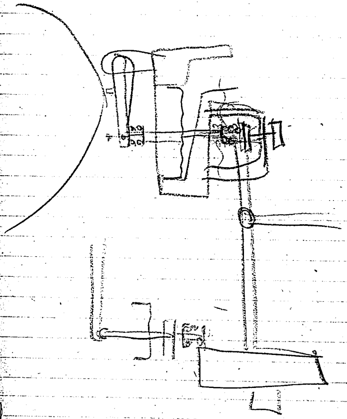
3000
80,000

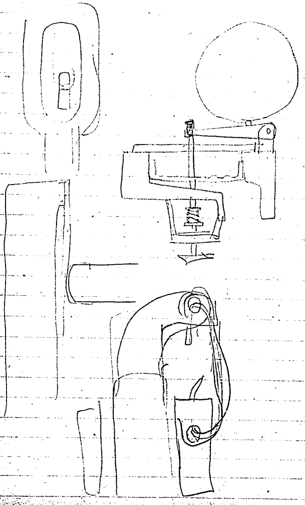
120

35

60 lbs

41 C

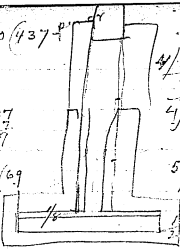




4/1750 (437
16
15
12
8

437
7
3059

3059/2100 (69
1830
2700



4/1750
350
3

4/1750

5/1400
280
78
140
160
1760
21000

6
3
16
64 - 1/8 op

25
25
125
50
4)625
156

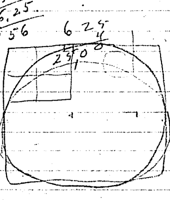
625
4
2500

1/2

25

25 ~~16~~ 62 - 3"
120 62/1000 - 1 1/2"
31 - 3/4
31 - 750
1 - 24
1/1000 48/1000

31)750 (24
62
184
126

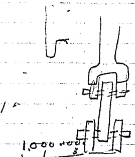


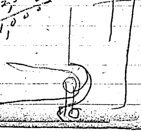
When freshly ppt Silver Ox is
acted on by Hydrogen peroxide
it is raised to higher state +
not sol in alkali -

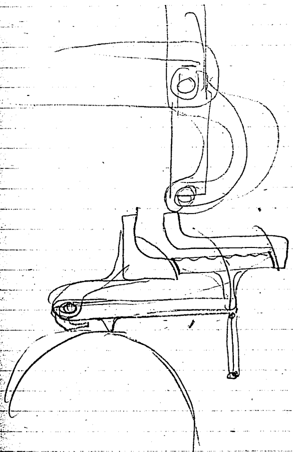
Cortland Westchester Co NY
lots of Diorite etc Rox

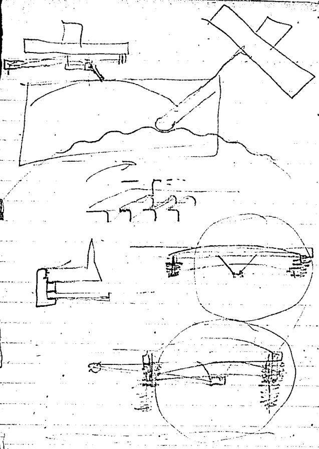
Try Reducing Ni from Sulphate
by Magnesium by adding little
platinum Chloride

1250
1250
6250
2500
1250
1562500
3131000









5)1750
350

7.5/1400-(1

17.

14
75
70
98 00
735

5/1400(280
10
4

280
75
1400
1960
21000

60-gms moved 60/1000

100

60/100

2

3

8 | in sec
3.6" per min —
4.5
.604 —

60
60
3,600 —

280

20)2800(14

1 lb moved .45

2000 grms

17

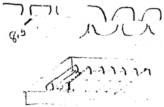
350)2100(6. grms —
2100

12)45(

1 lb moved .04 of ft per min —

1/25

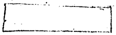
814
55
90
6512
11.6



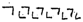
744)7000.

14
20 —
28

K_2CrO_4



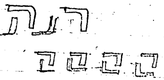
14)7000(8.6
6512
488



Tungstate KOH,

70

186
744
7
81.6
6512



744
744(11.6
70)810
70
110
70
40

7000(94
696
6696
304

1000
20
18
200

200 grms —
1,111
200

1100 mlg

814(7000(86
6512
4884
4884
14

70)814(11.6
70
114
70
44

4 gm... — 4/1750
437 ma per grain —

5/1311
262 /2100

66% fr
34% 100

437
75

437

437
450
2185
1748
196

75
6
450

280
75
140
190
21

63

745
36

866
36

893
36

586
36

66
802

36
92

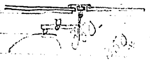
197
22
220

3/1420
473
947

212 180)270 (1420
32 1800
180 932
1

73	94	36	21	
74	92	72	18	69
71.7	92.2	108	20.5	105
69.1	89.3	144	20.2	137
65	86.6	180	21.6	168
60.2	80.2	216	20	197
56.1	74.5	252	18.4	226
49.5	66.2	288	16.7	250
40	54.6	324	14.6	270

92.2
71.7
20.5



0026

89.3
69.1
20.2

66.2
49.5
16.7

74.5
56.1
18.4

86.6
65.0
21.6

9

12

0026
0013
0007

180 270
90
45

6

200

2000
29
18000
40000
58000

1

3

7)39

5.7

37

513

399

7 — 16

23 — 14

7) 39

3) 69.7

23857

30 - 94

3944 26

7)23

32857

6.5714

7)23

3.2857

6.5714

87

7

94

86

7

93

87

27

94

23

4

92

85

7

92

9)70

777

9)230

25

39

32

71

16

87

23

4

9

28

64

.156
8
1.248

28 Li 8
92 Mr
1.56 K

d
45 — .64
109 — .64
173

350
350
1750
1050
12.25

23
4
92

39
4
156

92
17
109

352
351
351
35
1053
12,320

17
8
25

1.56
3

28
17
45

109
45
64

4
17
21

24
4
96

156
17
173

12
17

17

40
18
22

173
109
64

10

17
8
25

2

8
17
25

16

4
17
21

17

24
16
8

24
18
6

56
16
3

45
21
24

56
24
32

18

17

41
18
23

39
18
21

39
17
56
24
3

40
24
16

24

17
20
44
16
1

		Our Reg	
	1.25		1.56
twice	1.77		312
3 times	2.15		468
4	2.50		624
8	3.50		1.248

125
125
625
250
125
1.5625

312

175
175
875
1225
175
3062

160
160
960
160
256

156
3
4.68

156
150
7800
1560
2340

156
4
624

180
180
1440
180
324

410
410
410
1640
.81

202
202
404
404
408

179
179
1611
1253
179
204

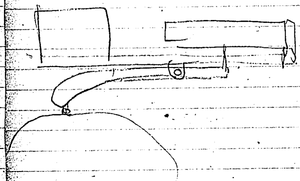
177
177
1239
1239
177
31329

210
210
4210

624

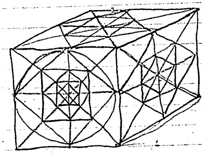
250
250
1250
500
6.25

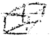
215
215
1075
215
430
4.622

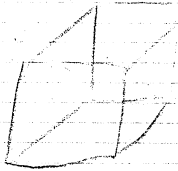


Dunderland

Basic glasses (Basaltic) occur at
Sorne, Screpidale, & Gribun Scotland







3) 1050
350
140

1.385

1400
180
1120
140
252

250
75
1250
1750
187.5

180) 1870 (1
12

180
60
24

5000

1024 00
960
64 00
320 00
320

1562.5
1.25
2.50
625.0
125
125

250
75
1250
1750
187.5

1003.

50

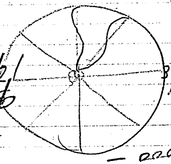
100
100

1000

1003.

180) 250 (13.85
180
700
740
300
1640
1400
160

1024
96
64
32
32



3) 180
60

10000

700

500
4
125

5000

1400-

45 175 Melange

6) 250-
40

240) 1870 (779.
1680
1900
1680
2200
2160

779-

40-) 240 (6

240) 40000 (166.
2400
1600
1440
160

166 melange

180.

250
075

187

240) 250.

6) 1000
167

150
240
6000
300
3

240
200-
4800

48 Chq
36 Arech

300
300
900 000
600

1st yr	90 000
2	180 000
3	300 000
4	450 000
5	600 000

	New	Renewals
6th year	750 000	90 000
7	900	180 000
8	1,000 000	300 000
9	1 600 000	450 000
10	1 000 000	600 000
11	1 000 —	840 000
	1 M —	1,040,000
		1 300 000
		1 450 000
		1 600 000
		1 840 000
		2 040 000

1st	300	
	300	
	300	
	300	
	300	
	300	300
	300	300
	300	300
	300	300
	300	300
	300	600
	300	600
	300	600
	300	600
	300	600
		600

300 = 900

300 000 1st yr
600 000 5 years to 10th
900 000 10th to 15th

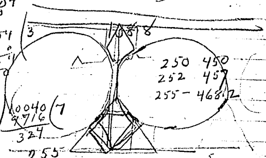
100
100 100 - 100
100

250
250
12500
500
62500

450 | 62500 (138,8
450
1750
1800
4000
3600
400

275
3
825

252
252
504
5040
1760
504
63504
1388 | 62500
1000
63500 (3



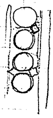
250 450
252 457
255 – 468,2

1388 | 10040 (7
9716
324

255
255
1275
1275
510
65025

62500
65025
475

65025
62500
1388 | 25250 (18,2
1388
11370
11104
266



8

96

54

148" wide
148
8
144 | 1184 (8,2 ft.
1152
320

.8 180
8
1440

148
8
592

825
180
66000
825
14850

148
8
1184

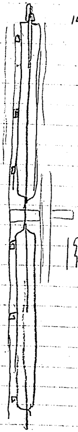
8 ft.

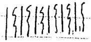
144 | 1184.

592 8 | 35
4.7 amp per ft

180
8
1440

50





1st muck in the solution from Fe or KOH. which entering the burs when outside hardens & makes them non conduct & cuts off considerable areas & also making small surface contact between mix & pocket, due to heat,

2 = Some tubes are coated with a scale of passive oxide & do not permit contact while other tubes are OK—

3 = Some tubes get a high temp than others,

60 grms

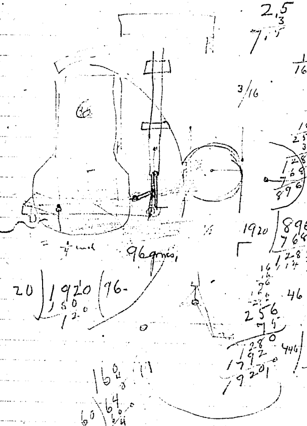
20/1000 -

1000 000.

1 grm per 1001 is
Equal to 2300 lbs per sq inch
our wt equal 4900 lbs
20 -

446
2200
892 00
892
981200

446
2300
1338 00
892
1017800



2.5
3
7.5

1/16

3/16

16
16
96
16
256
35
1280
768
8960

1920) 8960 (4.6
7680
12800
11520

96 grms,

20) 1920 (96
180
120

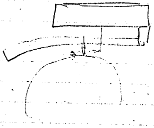
16
16
96
16
256
75
1280
1792
19200

46) 446.0 (

446) 8960 (20
892
40

160

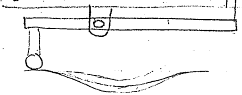
60) 640
60
40

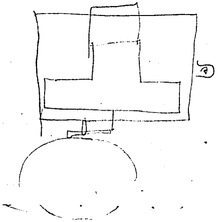


48 grms

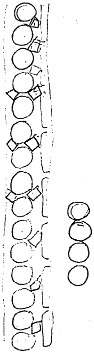
60 grms

2





3



55

|3|3|3|3|3|3|

75
20
150

11
14
44

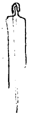
7 5
1 5
6 0
7

65 | 200
195
5

31 | 1
54

8

1 50
31
1 30
4.20
2.00



11
14
8
12